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| 10/510,347 | 04/06/2005 | Christiane Jayet-Laraffe | 3888-0108PUS1 | 7547 |
| 2292 7590 12/30/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | | |
| EXAMINER FOLEY, SHANON A | | | | |
| ART UNIT 1619 | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/510,347

Applicant(s)

JAYET-LARAFTE ET AL.

Examiner

SHANON A. FOLEY

Art Unit

1619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-9, 12, 13 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-9, 12, 13 and 15-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 22-27, 3-9, 12, 13, 15-17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh et al. (US 4,908,209) and Ohnishi et al. (US 6,524,508).

Ohnishi et al. teach yarn immersed and sprayed with a composition comprising bactericidal and fungicidal agents comprising 0.1% chitosan and 0.35% of a quaternary ammonium salt, didecyldimethylammonium chloride. See column 8, lines 45-53, column 10, line 66 to column 12, line 39 and claims 1, 3 and 5.

Ohnishi et al. do not teach or suggest the inclusion of bactericidal and fungicidal agents within plastics or that the agents are microencapsulated.

McIntosh, Jr., et al. teach cotton, wool, linen, collagen, chitin, chitosan and plastics, such as polyolefins and polystyrenes incorporated with a mixture of biocides that are microencapsulated, see column 8, lines 38-40, column 9, lines 10-12 and claims 10, 16, 17 and 20.

One of ordinary skill in the art at the time the invention was made would have been motivated to apply the bactericidal and fungicidal active agents of Ohnishi et al. in the plastic articles of McIntosh, Jr., et al. to eliminate the accumulation of microorganisms and/or to maintain integrity of the plastic articles and/or ensure the removal of microorganisms that cannot

be accomplished by conventional washing, see column 2, lines 2-7 of McIntosh, Jr., et al. One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for combining the bactericidal and fungicidal active agents of Ohnishi et al. in the plastic articles of McIntosh, Jr., et al. since McIntosh, Jr., et al. demonstrate a broad spectrum of antimicrobial effects with various biocidal compounds, including chitosan and ammonium salts, see column 5, line 1 to column 7, line 52 and claims 1, 5-10 and 16-20.

Although neither Ohnishi et al. nor McIntosh, Jr., et al. teach or suggest the instant chemicals recited in claims 6-8 and new claims 25-27, it is determined that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have substituted any specific known and readily-available-for-purchase fungicidal agents with a reasonable expectation of success since the teachings of Ohnishi et al. comprise art-recognized bactericide and fungicide components for reasons of record.

In response to the previous grounds of rejection regarding the teachings of McIntosh, Jr., et al., applicant argues that the reference does not teach information carriers as instantly required.

Applicant's arguments and a review of McIntosh, Jr., et al. have been fully considered, but are found unpersuasive. The instant information carriers required are made of plastic materials, see instant claims 13 and 15. Since the plastics taught by McIntosh, Jr., et al. may be formed to any conventional and general form used by the medical industry or the general public, it is evident that the biocidal plastics of McIntosh, Jr., et al. encompass the plastics forming the information carriers instantly claimed. See claims 8 and 17 of McIntosh, Jr., et al. in particular.

Applicant further argues that McIntosh, Jr., et al. do not teach or suggest a bactericidal and fungicidal agents to obtain the range of effectiveness instantly required.

Applicant's arguments and a review of McIntosh, Jr., et al. have been fully considered, but are found unpersuasive. In Example I of McIntosh, Jr., et al., antimicrobial activity of powders clearly inhibits specific bacteria, see column 7, lines 31-33. In Example II of McIntosh, Jr., et al., antimicrobial activity for mildews clearly inhibit various fungi and bacteria pervasive in high humidity conditions, see column 7, lines 37-45. Further, McIntosh, Jr., et al. specifically teach that mixtures of biocidal agents were more effective than use of a single antimicrobial, see column 9, lines 10-12.

In response to the previous grounds of rejection regarding the teachings of Ohnishi et al., applicant argues that the reference does not teach a bactericidal or a fungicidal agent.

Applicant's arguments and a review of Ohnishi, et al. have been fully considered, but are found unpersuasive. Ohnishi et al. specifically teach bactericidal and fungicidal agents comprising 0.1% chitosan and 0.35% of a quaternary ammonium salt, didecyldimethylammonium chloride. See column 8, lines 45-53, column 10, line 66 to column 12, line 39 and claims 1, 3 and 5.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh et al. and Ohnishi et al. as applied to claims 23, 22-27, 3-9, 12, 13, 15-17, 20 and 21 above, and further in view of Phan et al. (US 5,039,339).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh et al. and Ohnishi et al. as applied to claims 23, 22-27, 3-9, 12, 13, 15-17, 20 and 21 above, and further in view of Widra (US 4,570,629).

For previous rejections concerning Phan et al. and Widra, applicant argues that these teachings do not satisfy the deficiencies of McIntosh et al. and Ohnishi et al.

Applicant's arguments have been fully considered, but are found unpersuasive since there are no deficiencies evident from the combined teachings of McIntosh et al. and Ohnishi et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANON A. FOLEY whose telephone number is (571)272-0898. The examiner can normally be reached on flex, generally M-F 7AM - 3 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne L. Eyler can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shanon A. Foley/
Primary Examiner
Art Unit 1619